

AMENDMENTS TO THE CLAIMS:

Claims 1-16 were pending at the time of the Office Action. Claims 1, 5-7, 11, 12 and 16 have been amended. Claims 1-16 are currently pending.

In the Claims:

1. (Currently Amended) A data structure residing on a computer-readable medium for providing tool design and instructions in a dynamic manufacturing environment, the data structure comprising:

at least one tool object, the at least one tool object configured to be referenced in product information, the at least one tool object configured to be changed without causing the product information to be changed, and the at least one tool object configured to represent all of a plurality of versions~~a plurality of objects for abstracting tool resources, each object represents all changes that relate to one~~ of a tool or a part of a tool; and

a tool usage instruction generator,

wherein instances of the objects are generated for associated instructions for tool usage the instruction generator is configured to generate and output at least one instruction identifying which version of the tool or the part of the tool to be used in the manufacturing environment,

wherein the version of the tool or the part of the tool to be used is based on the tool object, and

wherein the version of the tool or the part of the tool is instances are based on product information, and

wherein the tool usage instruction generator is configured to output the generated tool usage instruction.

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2. (Original) The data structure of claim 1, wherein the product information includes information identifying configuration of the product.

3. (Original) The data structure of claim 2, wherein the information identifying configuration of the product includes product option information.

4. (Original) The data structure of claim 2, wherein the product information includes definition of a functional deliverable of the product.

5. (Currently Amended) The data structure of claim 4, wherein the functional deliverable of the product includes a production line number where the tool object applies.

6. (Currently Amended) The data structure of claim 1, wherein an instance of the tool object includes version information.

7. (Currently Amended) A computer-program product residing on a computer-readable medium for performing a method of generating one or more installation instructions, the method comprising:

receiving at least a portion of product information for a manufactured product ~~entering a definition of a functional deliverable of the product~~ and information identifying configuration of the manufactured product at the an input device of the operator of a computer system; and
generating one or more installation instructions; and
outputting the generated one or more installation instructions,
wherein the portion of the product information received includes at least one tool object,

wherein at least one of the generated one or more installation instructions identifies which version of a tool or a part of the tool to be used in a manufacturing environment,

wherein the version of the tool or the part of the tool to be used is based on the tool object includes one or more instances of one of a plurality of tool resource objects,

wherein the plurality of at least one tool object is configured to represent all of a plurality of versions resource objects being abstractions of tool resources, each tool resource object represents all changes that relate to one of a tool or a part of a tool, and

wherein the version of the tool or the part of the tool is one or more instances are based on the product information.

8. (Original) The computer-program product of claim 7, wherein the product information includes information identifying configuration of the product.

9. (Original) The computer-program product of claim 8, wherein the information identifying configuration of the product includes product option information.

10. (Original) The computer-program product of claim 7, wherein the product information includes definition of a functional deliverable of the product.

11. (Currently Amended) The computer-program product of claim 10, wherein the functional deliverable of the product includes production line number where the tool object applies.

12. (Currently Amended) A computer-program product residing on a computer-readable medium for performing generation of one or more installation instructions, the computer-program product comprising:

means for ~~receiving~~ entering a definition of a functional deliverable of ~~the a~~ product and information identifying configuration of the product at ~~the an~~ input device of the operator of a computer system; and

means for generating one or more installation instructions; and

means for outputting the generated one or more installation instructions,

wherein the definition of the functional deliverable of the product received includes at least one tool resource object,

wherein at least one of the generated one or more installation instructions identifies which version of a tool or a part of the tool to be used in a manufacturing environment,

wherein the version of the tool or the part of the tool to be used is based on the tool resource object includes one or more instances of one of a plurality of tool resource objects,

wherein the plurality of at least one tool resource object is configured to represent all of a plurality of versions objects being abstractions of tool resources, each tool resource object represents all changes that relate to one of a tool or a part of a tool, and

wherein the version of the tool or the part of the tool is ~~one or more instances are~~ based on product information.

13. (Original) The computer-program product of claim 12, wherein the product information includes information identifying configuration of the product.

14. (Original) The computer-program product of claim 13, wherein the information identifying configuration of the product includes product option information.

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15. (Original) The computer-program product of claim 12, wherein the product information includes definition of a functional deliverable of the product.

16. (Currently Amended) The computer-program product of claim 15, wherein the functional deliverable of the product includes production line number where the tool resource object applies.

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